Abstract of the Disclosure

Methods and apparatus for delivering and installing a new length of tubing between two sections of a patient's existing body organ tubing and at least partly outside of that existing structure. For example, the new length of tubing may be for the purpose of providing the patient with a coronary bypass. The new tubing may be an artificial graft, a natural graft (harvested elsewhere from the patient), or both. The new tubing is delivered to and installed at the operative site primarily by working through the patient's existing tubular body organ structure. This avoids the need for any significant surgery on the patient. The artificial grafts may have shapes other than tubular. Certain procedural and apparatus aspects of the invention have uses other than in connection with grafting in general or tubular grafting in particular.